

ADP Series Special for LCD Power supply WIDE INPUT, NON-ISOLATED & REGULATED SINGLE POSITIVE OR NEGATIVE OUTPUT



multi-country patent protection **RoHS**

FEATURES

- I Apply to LCD display
- I Small footprint, thickness less than 7mm
- I Wide input 5 to 12VDC
- I Industry standard pinout
- I Free air convection
- I No heat sink required
- I Output voltage adjustable
- I Remote ON/OFF

APPLICATIONS

ADP series are specially designed for LCD display, these produces have wide output voltage adjustable range, and function of remote ON/OFF, free air convection, and No heat sink required while use.

MORNSUN Science & Technology Co.,Ltd.

Address: No. 5, Kehui St. 1, Kehui development center, Science Ave., Guangzhou Science City, Luogang district, Guangzhou, P.R.China.

Tel: 86-20-38601850

Fax:86-20-38601272

<http://www.mornsun-power.com>

PRODUCT PROGRAM

Part Number	Input Voltage(VDC)		ON/OFF Function	Output Voltage Characteristic
	Range	Nominal		
ADP05C24	5.0-12	5.0	No	Negative Voltage output non-adjustable
ADP05C24A			Yes	Negative Voltage output adjustable
ADP0524A			Yes	Positive Voltage output adjustable
ADP0528A			Yes	Positive Voltage output adjustable

ON/OFF Function: Refer to recommended circuit.

OUTPUT SPECIFICATIONS

Item	Part Number	Test Conditions	Min	Max	Units
Output Voltage (Vout)	ADP05C24	Vin=5.0-12V, RL=2K Refer to recommended circuit	-25	-23	V
	ADP05C24A	Vin=5V, Radj=0-20kΩ, ON/OFF connect to GND, Refer to recommended circuit	-25	-6.5*	
	ADP0524A		6*	25	
	ADP0528A		6*	30	
Ripple & Noise	ADP05C24	Vin=5.0-12V, RL=2K, Cout=100μF Refer to recommended circuit		200	mVp-p
	ADP05C24A	Vin=5-12VDC, RL=2K, Radj=0-20kΩ ON/OFF connect to GND, Cout=100μF Refer to recommended circuit		200	
	ADP0524A			200	
	ADP0528A			450	
Efficiency (η)	ADP05C24	Vin=5V, RL=2K, Radj=0Ω, ON/OFF connect to GND, Refer to recommended circuit	61		%
	ADP05C24A		60		
	ADP0524A		61		
	ADP0528A		60		

Note: *When Vin change at 5.0-12V, adjustable I Voutl (min) will change between 6-12V;

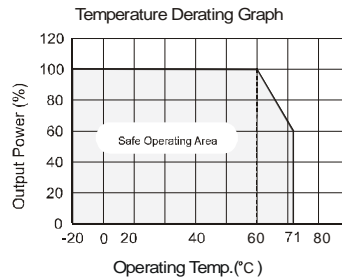
COMMON SPECIFICATION

Item	Test Conditions	Min	Typ	Max	Units
Storage Humidity				95	%
Storage Temperature		-40		125	
Operating Temp.	Power derating (above 60°C)	-20	15	71	°C
Temp. rise at full load					
Lead Temperature	1.5mm from case for 10 seconds			300	
Cooling		Free air convection			
Case material		Plastic (UL94-V0)			
MTBF	25°C (MIL-HDBK-217F)	1000			K hours
Weight			4.0		g

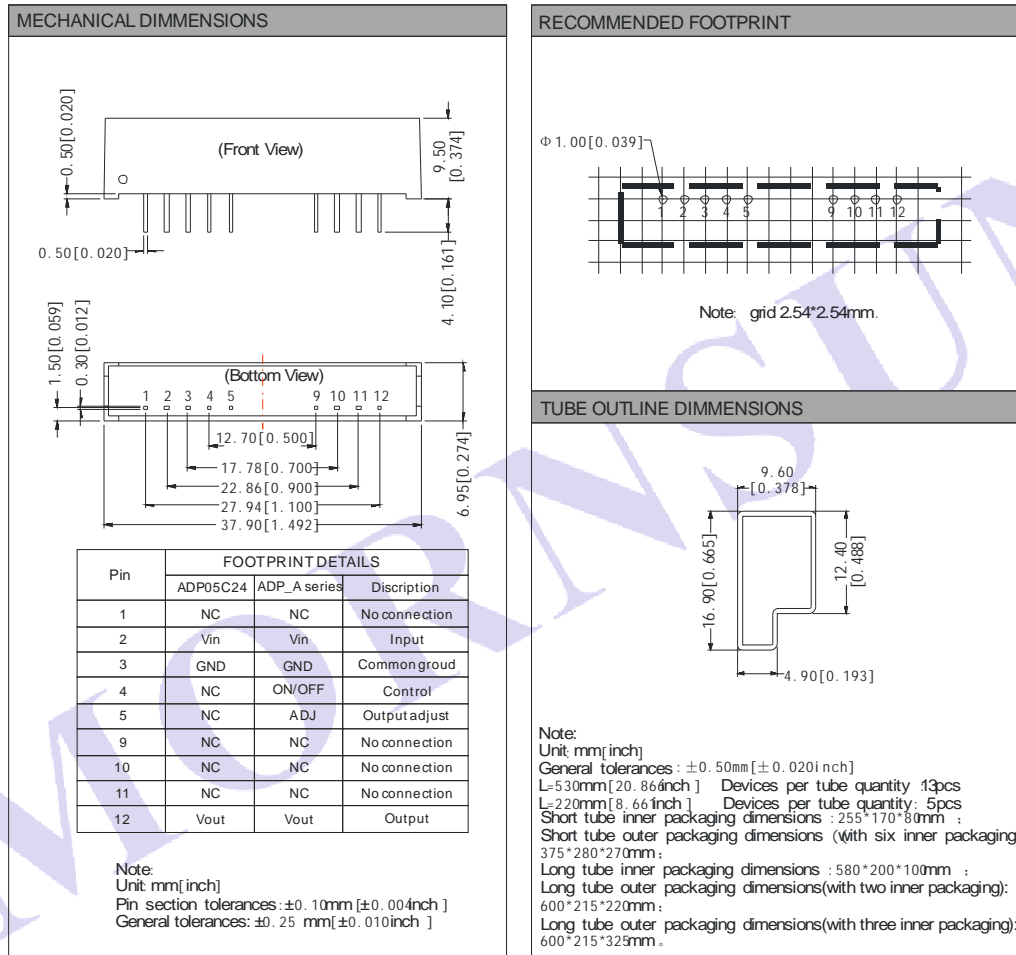
Note:

1. All specifications measured at TA=25°C, humidity<75%, nominal input voltage and rated output load unless otherwise specified;
2. The nominal value is -24V, 24V or 28V.

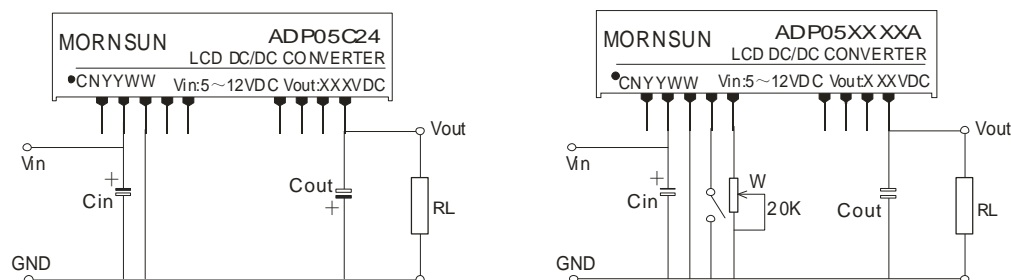
TYPICAL CHARECTERISTICS



OUTLINE DIMENSIONS & FOOTPRINT DETAILS



RECOMMENDED CIRCUIT



- Note:
1. When use the converter, filter capacitors should be connected to the input and output end, to reduce ripple and noise.
 2. Output voltage adjustor "W" is recommended to use 20K Ω , when "W" $=0\Omega$, $I_{VoutI}=\text{max}$; "W" $=20K\Omega$, $I_{VoutI}=\text{min}$.
 3. ON/OFF function: when switch close, natural output; when switch open, output shutdown.
 4. ADJ pin is not allowed to open, or it may cause damage to the device.